Map Unit Description (MN)

Mahnomen County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

33B--Barnes loam, 2 to 6 percent slopes

Barnes

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap1 -- 0 to 9 in	loam	moderate	1.63 to 2.17 in	6.1 to 7.8
Bw1 -- 9 to 15 in	loam	moderate	0.89 to 1.12 in	6.1 to 7.8
Bk2,C1 -- 15 to 60 in	loam	moderate	6.28 to 8.53 in	7.4 to 8.4

36--Flom silty clay loam

Flom

Extent: 90 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap1 -- 0 to 10 in	silty clay loam	moderately slow	1.77 to 2.17 in	6.1 to 7.8
ABg,Bg1 -- 10 to 20 in	clay loam	moderately slow	1.54 to 1.94 in	6.6 to 8.4
Bkg,Cg -- 20 to 60 in	loam	moderately slow	5.57 to 7.56 in	7.4 to 8.4

38B--Waukon loam, 2 to 8 percent slopes

Waukon

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 8 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 7 in	loam	moderate	1.42 to 1.70 in	6.1 to 7.3
E..Bt -- 7 to 24 in	clay loam	moderate	2.54 to 3.22 in	6.1 to 8.4
C1 -- 24 to 60 in	loam	moderate	5.37 to 6.81 in	7.4 to 8.4

38C--Waukon loam, 8 to 15 percent slopes

Waukon

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 8 in	loam	moderate	1.57 to 1.89 in	6.1 to 7.3
E..Bt -- 8 to 23 in	clay loam	moderate	2.24 to 2.84 in	6.1 to 8.4
C1 -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4

38E--Waukon loam, 15 to 30 percent slopes

Waukon

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 4 in	loam	moderate	0.79 to 0.94 in	6.1 to 7.3
E..Bt -- 4 to 20 in	clay loam	moderate	2.42 to 3.07 in	6.1 to 8.4
C1 -- 20 to 60 in	loam	moderate	5.96 to 7.56 in	7.4 to 8.4

40B--Nebish loam, 2 to 8 percent slopes

Nebish

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 8 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,E -- 0 to 5 in	loam	moderate	1.02 to 1.13 in	5.6 to 7.3
Bt1,Bt2 -- 5 to 24 in	clay loam	moderate	2.83 to 3.59 in	5.6 to 7.8
C1 -- 24 to 60 in	loam	moderate	3.94 to 6.81 in	7.4 to 8.4

40C--Nebish loam, 8 to 15 percent slopes

Nebish

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	loam	moderate	0.63 to 0.69 in	5.6 to 7.3
E -- 3 to 10 in	sandy loam	moderately rapid	0.74 to 1.27 in	5.6 to 7.3
Bt1,Bt2 -- 10 to 23 in	clay loam	moderate	1.95 to 2.47 in	5.6 to 7.8
C1 -- 23 to 60 in	loam	moderate	4.07 to 7.03 in	7.4 to 8.4

40E--Nebish loam, 15 to 30 percent slopes

Nebish

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 2 in	loam	moderate	0.39 to 0.43 in	5.6 to 7.3
E1 -- 2 to 6 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.6 to 7.3
Bt1,Bt2 -- 6 to 22 in	clay loam	moderate	2.42 to 3.07 in	5.6 to 7.8
C1 -- 22 to 60 in	loam	moderate	4.16 to 7.18 in	7.4 to 8.4

59--Grimstad sandy loam

Grimstad

Extent: 90 percent of the unit
Landform(s): rises on moraines
Slope gradient: 0 to 3 percent
Parent material: outwash over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	7.4 to 8.4
Bk1..C1 -- 8 to 39 in	loamy fine sand	rapid	2.49 to 4.35 in	7.4 to 9.0
2C2 -- 39 to 60 in	loam	moderate	2.30 to 3.96 in	7.4 to 9.0

63--Rockwell loam

Rockwell

Extent: 90 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 1 percent
Parent material: lacustrine material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loam	moderate	1.63 to 1.99 in	7.4 to 8.4
Bkg1,Bkg2 -- 9 to 27 in	fine sandy loam	moderately rapid	2.66 to 3.01 in	7.9 to 8.4
2Cg1 -- 27 to 34 in	sand	rapid	0.35 to 0.50 in	7.4 to 7.8
3Cg2 -- 34 to 60 in	loam	moderate	4.68 to 5.72 in	7.4 to 7.8

121--Wykeham fine sandy loam

Wykeham

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	fine sandy loam	moderately rapid	0.77 to 1.06 in	5.1 to 6.5
E -- 6 to 10 in	loamy fine sand	moderate	0.39 to 0.67 in	5.1 to 6.5
BE,Bt -- 10 to 30 in	sandy clay loam	moderate	2.41 to 3.61 in	5.6 to 7.3
BC,C -- 30 to 60 in	sandy loam	moderate	3.29 to 4.79 in	7.4 to 8.4

125--Beltrami loam

Beltrami

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
A --	0 to 4 in	loam	moderate	0.79 to 0.87 in	6.1 to 7.3
E --	4 to 9 in	loam	moderately rapid	0.56 to 0.97 in	5.6 to 7.3
Bt1..Bt3 --	9 to 36 in	clay loam	moderate	4.02 to 5.09 in	5.6 to 7.8
C --	36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

127B--Sverdrup sandy loam, 1 to 6 percent slopes

Sverdrup

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, hillslopes on outwash plains
Slope gradient: 1 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .10
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.48 in	6.1 to 7.3
Bw1,2Bw2 -- 10 to 27 in	loamy sand	moderately rapid	1.35 to 2.37 in	6.1 to 7.8
2C1,2C2 -- 27 to 60 in	sand	rapid	0.66 to 1.98 in	7.4 to 8.4

180--Gonvick loam

Gonvick

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 1
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bt1,Bt2 -- 10 to 25 in	clay loam	moderate	2.30 to 2.92 in	6.6 to 7.3
C -- 25 to 60 in	loam	moderate	5.20 to 6.58 in	7.4 to 8.4

191--Epoufette sandy loam

Epoufette

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, swales on outwash plains
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 4w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
A --	0 to 9 in	sandy loam	moderately rapid	0.81 to 1.27 in	6.1 to 7.3
Eg --	9 to 27 in	sand	rapid	0.89 to 1.24 in	6.1 to 7.3
Btg --	27 to 35 in	sandy loam	moderately rapid	0.66 to 1.16 in	6.6 to 7.8
Cg --	35 to 60 in	gravelly sand	very rapid	0.25 to 0.74 in	7.4 to 8.4

205--Karlstad sandy loam

Karlstad

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains, rises on outwash plains
Slope gradient: 1 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,E -- 0 to 11 in	sandy loam	moderately rapid	1.43 to 1.98 in	4.5 to 7.3
Bt1 -- 11 to 20 in	sandy loam	moderately rapid	1.18 to 1.63 in	6.1 to 7.3
2Bt2 -- 20 to 25 in	gravelly sandy loam	moderately rapid	0.61 to 0.82 in	6.1 to 7.8
2C -- 25 to 60 in	stratified gravelly coarse sand to loamy fine sand	very rapid	0.69 to 1.39 in	7.4 to 8.4

236--Vallers silty clay loam

Vallers

Extent: 90 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: lacustrine material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silty clay loam	moderately slow	1.63 to 1.99 in	7.4 to 8.4
Bkg1 -- 9 to 19 in	silty clay loam	moderately slow	1.48 to 1.87 in	7.4 to 8.4
Bkg2,Cg -- 19 to 60 in	clay loam	moderately slow	6.96 to 7.78 in	7.4 to 8.4

267B--Snellman sandy loam, 2 to 8 percent slopes

Snellman

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 8 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 12 in	sandy loam	moderate	0.78 to 1.21 in	5.1 to 6.5
Bt1,Bt2 -- 12 to 23 in	sandy clay loam	moderate	1.32 to 1.98 in	5.6 to 7.3
C -- 23 to 60 in	sandy loam	moderate	4.07 to 5.92 in	7.4 to 8.4

267C--Snellman sandy loam, 8 to 15 percent slopes

Snellman

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 15 in	loamy sand	moderate	1.06 to 1.65 in	5.1 to 6.5
Bt1,Bt2 -- 15 to 28 in	sandy clay loam	moderate	1.56 to 2.34 in	5.6 to 7.3
C -- 28 to 60 in	sandy loam	moderate	3.51 to 5.10 in	7.4 to 8.4

267E--Snellman sandy loam, 15 to 30 percent slopes

Snellman

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E -- 3 to 8 in	fine sandy loam	moderate	0.43 to 0.66 in	5.1 to 6.5
Bt1,Bt2 -- 8 to 29 in	loam	moderate	2.55 to 3.83 in	5.6 to 7.3
C -- 29 to 60 in	sandy loam	moderate	3.38 to 4.91 in	7.4 to 8.4

290B--Rothsay silt loam, 1 to 6 percent slopes

Rothsay

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 6 percent
Parent material: lacustrine material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap1,A2 -- 0 to 13 in	silt loam	moderate	2.86 to 3.12 in	6.6 to 7.3
Bw -- 13 to 23 in	silt loam	moderate	1.67 to 2.17 in	6.6 to 7.8
Bk -- 23 to 35 in	silt loam	moderately rapid	2.44 to 2.69 in	7.4 to 8.4
C -- 35 to 60 in	silt loam	moderately rapid	4.96 to 5.46 in	7.4 to 8.4

296--Fram loam

Fram

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 12 in	loam	moderate	2.36 to 2.83 in	7.4 to 8.4
Bk -- 12 to 19 in	fine sandy loam	moderate	1.13 to 1.42 in	7.4 to 8.4
C -- 19 to 60 in	loam	moderate	5.32 to 8.19 in	7.4 to 8.4

332B--Sugarbush sandy loam, 1 to 8 percent slopes

Sugarbush

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains, hillslopes on valley trains
Slope gradient: 1 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.47 in	5.6 to 7.3
E -- 3 to 9 in	loamy sand	rapid	0.53 to 0.65 in	5.6 to 7.3
Bt -- 9 to 24 in	sandy loam	moderately rapid	1.80 to 2.24 in	5.6 to 7.3
2C -- 24 to 60 in	gravelly coarse sand	very rapid	0.72 to 2.15 in	5.6 to 8.4

335--Urness mucky silt loam

Urness

Extent: 90 percent of the unit
Landform(s): depressions on moraines, lakebeds on moraines
Slope gradient: 0 to 1 percent
Parent material: lacustrine material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained
Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .37
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 12 in	mucky silt loam	moderate	2.13 to 2.83 in	7.4 to 8.4
Cg1..Cg3 -- 12 to 60 in	mucky silt loam	moderate	7.69 to 10.57 in	7.4 to 8.4

344--Quam silty clay loam

Quam

Extent: 90 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: lacustrine material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silty clay loam	moderately slow	1.63 to 1.99 in	6.6 to 7.8
A1..A3 -- 9 to 44 in	silty clay loam	moderately slow	5.61 to 7.71 in	6.6 to 7.8
2Cg1,2Cg2 -- 44 to 60 in	clay loam	moderately slow	2.20 to 2.99 in	7.4 to 8.4

346--Talmoon loam

Talmoon

Extent: 90 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loam	moderate	1.02 to 1.13 in	5.1 to 7.3
E -- 5 to 13 in	loam	moderate	1.02 to 1.73 in	5.1 to 7.3
Btg -- 13 to 25 in	clay loam	moderately slow	1.95 to 2.32 in	5.6 to 7.3
Cg -- 25 to 60 in	loam	moderately slow	5.20 to 6.58 in	7.4 to 8.4

352B--Heimdal loam, 2 to 6 percent slopes

Heimdal

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Ap --	0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
Bw --	8 to 17 in	loam	moderate	1.09 to 1.72 in	6.1 to 7.8
Bk --	17 to 32 in	loam	moderate	1.65 to 2.84 in	7.4 to 8.4
C --	32 to 60 in	loam	moderate	3.07 to 4.47 in	7.4 to 8.4

426--Foldahl sandy loam

Foldahl

Extent: 90 percent of the unit
Landform(s): rises on moraines
Slope gradient: 0 to 3 percent
Parent material: lacustrine material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.10 to 1.42 in	6.1 to 7.8
Bw1..C1 -- 8 to 30 in	loamy sand	rapid	1.54 to 2.65 in	6.6 to 7.8
2C2 -- 30 to 42 in	loam	moderate	1.71 to 2.32 in	7.4 to 8.4
2C3 -- 42 to 60 in	loam	moderate	2.48 to 3.37 in	7.4 to 8.4

494B--Darnen loam, 2 to 6 percent slopes

Darnen

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: colluvial material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 28 in	loam	moderate	5.03 to 5.59 in	6.6 to 7.8
Bw1,Bw2 -- 28 to 38 in	loam	moderate	1.48 to 1.87 in	6.1 to 7.8
C -- 38 to 60 in	loam	moderate	3.09 to 4.19 in	7.4 to 8.4

540--Seelyeville muck

Seelyeville

Extent: 90 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: herbaceous organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 44 in	muck	moderately rapid	15.43 to 19.84 in	
Oa2,Oa3 -- 44 to 60 in	muck	moderately rapid	5.51 to 7.09 in	

543--Markey muck

Markey

Extent: 90 percent of the unit
Landform(s): depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: organic material over outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1..Oa3 -- 0 to 28 in	muck	moderately rapid	9.78 to 12.58 in	
Cg1,Cg2 -- 28 to 60 in	fine sand	rapid	0.96 to 2.55 in	

544--Cathro muck

Cathro

Extent: 90 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: organic material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 15 in	muck	moderately rapid	6.73 to 8.23 in	
Oa2 -- 15 to 24 in	muck	moderately rapid	3.17 to 4.07 in	
Cg1,Cg2 -- 24 to 60 in	loam	moderate	3.94 to 6.81 in	

718B--Naytahwaush loam, 2 to 8 percent slopes

Naytahwaush

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 8 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 4 in	loam	moderate	0.79 to 0.94 in	5.6 to 7.3
E -- 4 to 8 in	loam	moderate	0.63 to 0.94 in	5.6 to 7.3
Bt1..BC -- 8 to 32 in	silty clay loam	slow	2.40 to 4.56 in	6.1 to 7.8
C -- 32 to 60 in	silty clay loam	moderately slow	3.91 to 5.31 in	7.4 to 8.4

718C--Naytahwaush loam, 8 to 15 percent slopes

Naytahwaush

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loam	moderate	1.02 to 1.23 in	5.6 to 7.3
E -- 5 to 8 in	loam	moderate	0.44 to 0.66 in	5.6 to 7.3
Btg..BC -- 8 to 22 in	clay	slow	1.42 to 2.69 in	6.1 to 7.8
C -- 22 to 60 in	clay loam	moderately slow	5.29 to 7.18 in	7.4 to 8.4

718E--Naytahwaush loam, 15 to 30 percent slopes

Naytahwaush

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	loam	moderate	0.63 to 0.76 in	5.6 to 7.3
E -- 3 to 6 in	loam	moderate	0.44 to 0.66 in	5.6 to 7.3
Bt1..BC -- 6 to 20 in	clay	slow	1.42 to 2.69 in	6.1 to 7.8
C -- 20 to 60 in	clay loam	moderately slow	5.57 to 7.56 in	7.4 to 8.4

737--Mahkonce loam

Mahkonce

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	loam	moderately slow	0.67 to 0.87 in	5.6 to 7.3
E -- 4 to 10 in	loam	moderately slow	0.94 to 1.30 in	5.6 to 7.3
Bt1..Bt3 -- 10 to 26 in	clay	slow	2.10 to 3.07 in	6.1 to 7.3
C -- 26 to 60 in	clay loam	moderately slow	4.40 to 6.43 in	7.4 to 8.4

746--Haslie muck

Haslie

Extent: 90 percent of the unit
Landform(s): depressions on moraines, depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: organic material over coprogenous earth
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1,Oa2 -- 0 to 42 in	muck	moderately rapid	14.74 to 20.22 in	
Cg -- 42 to 60 in	coprogenous earth	slow	3.19 to 4.25 in	

748--Hamlet loam

Hamlet

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .20
Land capability, nonirrigated 2c
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 12 in	loam	moderate	2.36 to 2.60 in	6.6 to 7.3
Bw1,Bw2 -- 12 to 20 in	loam	moderate	1.24 to 1.57 in	6.6 to 7.8
Bk,C -- 20 to 60 in	loam	moderate	5.57 to 7.56 in	7.9 to 8.4

749--Colvin silt loam, occasionally flooded

Colvin, occasionally flooded

Extent: 90 percent of the unit
Landform(s): flats on flood plains, swales on stream terraces
Slope gradient: 0 to 1 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 9 in	silt loam	moderate	1.81 to 1.99 in	7.4 to 8.4
Bkg1,Bkg2 -- 9 to 28 in	silt loam	moderate	3.40 to 3.97 in	7.4 to 8.4
Cg1 -- 28 to 52 in	silt loam	moderate	4.08 to 4.80 in	7.4 to 8.4
Cg2 -- 52 to 60 in	stratified fine sandy loam to silty clay loam	moderate	1.34 to 1.57 in	7.4 to 8.4

767--Auganaush loam

Auganaush

Extent: 90 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loam	moderate	1.02 to 1.23 in	5.6 to 7.3
E -- 5 to 8 in	loam	moderate	0.44 to 0.66 in	5.6 to 7.3
Btg1,Btg2 -- 8 to 22 in	clay	slow	1.42 to 2.69 in	5.6 to 7.3
Btg3,Cg -- 22 to 60 in	silty clay loam	moderately slow	5.29 to 7.18 in	7.4 to 8.4

775B--Sugarbush-Two Inlets complex, 1 to 8 percent slopes

Sugarbush

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	sandy loam	moderately rapid	0.51 to 0.59 in	5.6 to 7.3
E -- 4 to 9 in	loamy sand	rapid	0.46 to 0.56 in	5.6 to 7.3
Bt -- 9 to 27 in	sandy loam	moderately rapid	2.13 to 2.66 in	5.6 to 7.3
2C -- 27 to 60 in	coarse sand	very rapid	0.66 to 1.98 in	5.6 to 8.4

Two Inlets

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 1 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	sandy loam	rapid	0.20 to 0.24 in	5.6 to 7.3
E -- 2 to 8 in	loamy coarse sand	rapid	0.53 to 0.65 in	5.6 to 7.3
Bt -- 8 to 27 in	coarse sand	rapid	1.70 to 2.08 in	6.1 to 7.3
C -- 27 to 60 in	gravelly coarse sand	very rapid	0.66 to 1.32 in	7.4 to 8.4

775C--Sugarbush-Two Inlets complex, 8 to 15 percent slopes

Sugarbush

Extent: 50 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.47 in	5.6 to 7.3
E -- 3 to 10 in	loamy sand	rapid	0.60 to 0.74 in	5.6 to 7.3
Bt -- 10 to 27 in	sandy loam	moderately rapid	2.03 to 2.54 in	5.6 to 7.3
C -- 27 to 60 in	coarse sand	very rapid	0.66 to 1.98 in	5.6 to 8.4

Two Inlets

Extent: 40 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	sandy loam	rapid	0.31 to 0.38 in	5.6 to 7.3
E -- 3 to 9 in	loamy coarse sand	rapid	0.53 to 0.65 in	5.6 to 7.3
Bt -- 9 to 29 in	coarse sand	rapid	1.81 to 2.21 in	6.1 to 7.3
C -- 29 to 60 in	gravelly coarse sand	very rapid	0.61 to 1.23 in	7.4 to 8.4

776B--Snellman-Sugarbush complex, 2 to 8 percent slopes

Snellman

Extent: 60 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 8 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	sandy loam	moderately rapid	0.26 to 0.35 in	5.1 to 6.5
E -- 2 to 18 in	loamy sand	moderate	1.45 to 2.26 in	5.1 to 6.5
Bt1,Bt2 -- 18 to 33 in	sandy clay loam	moderate	1.80 to 2.69 in	5.6 to 7.3
C -- 33 to 60 in	sandy loam	moderate	2.94 to 4.28 in	7.4 to 8.4

Sugarbush

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.47 in	5.6 to 7.3
E -- 3 to 13 in	loamy sand	rapid	0.89 to 1.08 in	5.6 to 7.3
Bt -- 13 to 35 in	sandy loam	moderately rapid	2.65 to 3.31 in	5.6 to 7.3
2C -- 35 to 60 in	sand	very rapid	0.50 to 1.49 in	5.6 to 8.4

776C--Snellman-Sugarbush complex, 8 to 15 percent slopes

Snellman

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	fine sandy loam	moderately rapid	0.26 to 0.35 in	5.1 to 6.5
E -- 2 to 18 in	loamy sand	moderate	1.45 to 2.26 in	5.1 to 6.5
Bt -- 18 to 26 in	sandy clay loam	moderate	0.94 to 1.42 in	5.6 to 7.3
C -- 26 to 60 in	sandy loam	moderate	3.72 to 5.42 in	7.4 to 8.4

Sugarbush

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 8 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	sandy loam	moderately rapid	0.26 to 0.30 in	5.6 to 7.3
E -- 2 to 12 in	loamy sand	rapid	0.89 to 1.08 in	5.6 to 7.3
Bt -- 12 to 25 in	sandy loam	moderately rapid	1.61 to 2.01 in	5.6 to 7.3
2C -- 25 to 60 in	gravelly sand	very rapid	0.69 to 2.08 in	5.6 to 8.4

776E--Snellman-Sugarbush complex, 15 to 30 percent slopes

Snellman

Extent: 50 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	sandy loam	moderately rapid	0.26 to 0.35 in	5.1 to 6.5
E -- 2 to 12 in	loamy sand	moderate	0.89 to 1.38 in	5.1 to 6.5
Bt -- 12 to 22 in	sandy clay loam	moderate	1.23 to 1.84 in	5.6 to 7.3
C -- 22 to 60 in	sandy loam	moderate	4.16 to 6.05 in	7.4 to 8.4

Sugarbush

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 1 in	sandy loam	moderately rapid	0.10 to 0.12 in	5.6 to 7.3
E -- 1 to 9 in	loamy coarse sand	rapid	0.74 to 0.91 in	5.6 to 7.3
Bt -- 9 to 22 in	sandy loam	moderately rapid	1.56 to 1.95 in	5.6 to 7.3
2C -- 22 to 60 in	gravelly sand	very rapid	0.76 to 2.27 in	5.6 to 8.4

827B--Heimdal-Esmond complex, 2 to 6 percent slopes

Heimdal

Extent: 60 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
Bw -- 8 to 17 in	loam	moderate	1.09 to 1.72 in	6.1 to 7.8
Bk -- 17 to 30 in	loam	moderate	1.43 to 2.47 in	7.4 to 8.4
C -- 30 to 60 in	loam	moderate	3.29 to 4.79 in	7.4 to 8.4

Esmond

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 13 in	loam	moderate	0.83 to 1.30 in	7.4 to 8.4
C -- 13 to 60 in	loam	moderate	5.15 to 7.50 in	7.4 to 8.4

827C2--Heimdal-Esmond complex, 6 to 12 percent slopes, eroded

Heimdal, eroded

Extent: 50 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
Bw -- 8 to 15 in	loam	moderate	0.85 to 1.35 in	6.1 to 7.8
Bk -- 15 to 26 in	loam	moderate	1.21 to 2.09 in	7.4 to 8.4
C -- 26 to 60 in	loam	moderate	3.72 to 5.42 in	7.4 to 8.4

Esmond, eroded

Extent: 40 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 24 in	loam	moderate	2.26 to 3.55 in	7.4 to 8.4
C -- 24 to 60 in	loam	moderate	3.94 to 5.73 in	7.4 to 8.4

867B--Graycalm-Menahga complex, 1 to 8 percent slopes

Graycalm

Extent: 55 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .15
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	loamy sand	rapid	0.12 to 0.24 in	3.5 to 6.5
Bw,E -- 2 to 18 in	sand	rapid	0.81 to 1.61 in	3.5 to 7.3
E&Bt -- 18 to 60 in	sand	rapid	1.67 to 3.76 in	3.5 to 7.3

Menahga

Extent: 35 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 8 in	loamy sand	rapid	0.79 to 0.94 in	4.5 to 6.5
Bw -- 8 to 22 in	loamy sand	rapid	0.71 to 0.99 in	4.5 to 6.5
C1,C2 -- 22 to 60 in	sand	rapid	1.89 to 2.65 in	5.6 to 7.8

903B--Barnes-Langhei complex, 2 to 6 percent slopes

Barnes

Extent: 65 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.28 to 1.70 in	6.1 to 7.8
Bw -- 7 to 14 in	loam	moderate	1.06 to 1.35 in	6.1 to 7.8
Bk,C -- 14 to 60 in	loam	moderate	6.39 to 8.68 in	7.4 to 8.4

Langhei

Extent: 25 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	loam	moderate	0.87 to 1.13 in	6.6 to 8.4
Bk -- 5 to 19 in	loam	moderate	2.07 to 2.62 in	7.9 to 8.4
C -- 19 to 60 in	loam	moderate	6.14 to 7.78 in	7.4 to 8.4

903C2--Barnes-Langhei complex, 6 to 12 percent slopes, eroded

Barnes, eroded

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	loam	moderate	1.06 to 1.42 in	6.1 to 7.8
Bw -- 6 to 11 in	loam	moderate	0.77 to 0.97 in	6.1 to 7.8
Bk,C -- 11 to 60 in	loam	moderate	6.83 to 9.28 in	7.4 to 8.4

Langhei, eroded

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 4 in	loam	moderate	0.67 to 0.87 in	6.6 to 8.4
Bk -- 4 to 32 in	loam	moderate	4.19 to 5.31 in	7.9 to 8.4
C -- 32 to 60 in	loam	moderate	4.19 to 5.31 in	7.4 to 8.4

942D2--Langhei-Barnes complex, 12 to 20 percent slopes, eroded

Langhei, eroded

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 12 to 20 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	loam	moderate	1.00 to 1.30 in	6.6 to 8.4
Bk -- 6 to 26 in	loam	moderate	3.01 to 3.81 in	7.9 to 8.4
C -- 26 to 60 in	loam	moderate	5.08 to 6.43 in	7.4 to 8.4

Barnes, eroded

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 12 to 20 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 7 in	loam	moderate	1.28 to 1.70 in	6.1 to 7.8
Bw -- 7 to 13 in	loam	moderate	0.89 to 1.12 in	6.1 to 7.8
Bk,C -- 13 to 60 in	loam	moderate	6.56 to 8.90 in	7.4 to 8.4

967B--Waukon-Langhei complex, 2 to 6 percent slopes

Waukon

Extent: 65 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	loam	moderate	1.18 to 1.42 in	6.1 to 7.3
E,BE,Bt -- 6 to 20 in	clay loam	moderate	2.13 to 2.69 in	6.1 to 8.4
C -- 20 to 60 in	loam	moderate	5.96 to 7.56 in	7.4 to 8.4

Langhei

Extent: 25 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 2 to 6 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	loam	moderate	1.00 to 1.30 in	6.6 to 8.4
Bk -- 6 to 39 in	loam	moderate	4.96 to 6.28 in	7.9 to 8.4
C -- 39 to 60 in	loam	moderate	3.13 to 3.96 in	7.4 to 8.4

967C2--Waukon-Langhei complex, 6 to 12 percent slopes, eroded

Waukon, eroded

Extent: 60 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	loam	moderate	1.18 to 1.42 in	6.1 to 7.3
E,BE,Bt -- 6 to 15 in	clay loam	moderate	1.36 to 1.72 in	6.1 to 8.4
C -- 15 to 60 in	loam	moderate	6.73 to 8.53 in	7.4 to 8.4

Langhei, eroded

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	loam	moderate	1.00 to 1.30 in	6.6 to 8.4
Bk -- 6 to 19 in	loam	moderate	1.95 to 2.47 in	7.9 to 8.4
C -- 19 to 60 in	loam	moderate	6.14 to 7.78 in	7.4 to 8.4

979D2--Langhei-Waukon complex, 12 to 20 percent slopes, eroded

Langhei, eroded

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 12 to 20 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loam	moderate	0.87 to 1.13 in	6.6 to 8.4
Bk -- 5 to 28 in	loam	moderate	3.43 to 4.34 in	7.9 to 8.4
C -- 28 to 60 in	loam	moderate	4.78 to 6.06 in	7.4 to 8.4

Waukon, eroded

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 12 to 20 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	loam	moderate	1.18 to 1.42 in	6.1 to 7.3
E,BE,Bt -- 6 to 14 in	clay loam	moderate	1.24 to 1.57 in	6.1 to 8.4
C -- 14 to 60 in	loam	moderate	6.85 to 8.68 in	7.4 to 8.4

1030--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 65 percent of the unit
Landform(s): moraines, outwash plains, stream terraces
Slope gradient: 1 to 50 percent
Parent material: sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class:

Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group:
Potential for frost action:

Representative soil profile:

Texture	Permeability	Available water capacity	pH

Udipsamments

Extent: 35 percent of the unit
Landform(s): moraines, outwash plains, stream terraces
Slope gradient: 1 to 50 percent
Parent material: sandy and gravelly outwash
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 1
Wind erodibility index (WEI): 220
Kw factor (surface layer) .02
Land capability, nonirrigated 8s
Hydric soil:
Hydrologic group: A
Potential for frost action: low

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
A --	0 to 14 in	sand	rapid	0.71 to 1.42 in	6.6 to 7.3
C1 --	14 to 60 in	sand	rapid	2.28 to 3.65 in	6.6 to 7.3
C2 --	60 to 80 in	coarse sand	very rapid	0.60 to 1.00 in	7.4 to 8.4

1113--Haslie, Seelyeville, and Cathro soils, ponded

Haslie, ponded

Extent: 30 percent of the unit
Landform(s): depressions on moraines, depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: organic material over coprogenous earth
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1,Oa2 -- 0 to 30 in	muck	moderately rapid	10.47 to 14.36 in	
Cg -- 30 to 60 in	coprogenous earth	moderately slow	5.39 to 7.18 in	

Seelyeville, ponded

Extent: 30 percent of the unit
Landform(s): depressions on moraines, depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: herbaceous organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 22 in	muck	moderately rapid	7.72 to 9.92 in	
Oa2,Oa3 -- 22 to 60 in	muck	moderately rapid	13.23 to 17.01 in	

1113--Haslie, Seelyeville, and Cathro soils, ponded

Cathro, ponded

Extent: 30 percent of the unit
Landform(s): depressions on moraines, depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: organic material over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1,Oa2 -- 0 to 37 in	muck	moderately rapid	16.65 to 20.35 in	
Cg1,Cg2 -- 37 to 60 in	clay loam	slow	2.51 to 5.02 in	

1117--Hedman loam

Hedman

Extent: 90 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 12 in	loam	moderate	2.36 to 2.60 in	6.6 to 7.8
Bkg1,Bkg2 -- 12 to 21 in	loam	moderate	1.09 to 1.72 in	7.4 to 8.4
Cg1,Cg2 -- 21 to 60 in	loam	moderate	4.29 to 7.41 in	7.4 to 8.4

1139--Marysland loam, occasionally flooded

Marysland, occasionally flooded

Extent: 90 percent of the unit
Landform(s): flats on flood plains, swales on stream terraces
Slope gradient: 0 to 1 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	7.4 to 8.4
Ak -- 8 to 16 in	loam	moderate	1.32 to 1.74 in	7.9 to 8.4
Bkg1,Bkg2 -- 16 to 33 in	loam	moderate	2.71 to 3.56 in	7.4 to 8.4
2Cg1,2Cg2 -- 33 to 60 in	stratified coarse sand to loamy fine sand	rapid	0.80 to 2.14 in	7.4 to 8.4

1142--Hedman-Fram complex

Hedman

Extent: 50 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	6.6 to 7.8
Bkg1,Bkg2 -- 13 to 21 in	fine sandy loam	moderate	0.94 to 1.50 in	7.4 to 8.4
Cg1,Cg2 -- 21 to 60 in	loam	moderate	4.29 to 7.41 in	7.4 to 8.4

Fram

Extent: 40 percent of the unit
Landform(s): rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 12 in	loam	moderate	2.36 to 2.83 in	7.4 to 8.4
Bk -- 12 to 19 in	fine sandy loam	moderate	1.13 to 1.42 in	7.4 to 8.4
C -- 19 to 60 in	loam	moderate	5.32 to 8.19 in	7.4 to 8.4

1147--Fordum, Fairdale, and Lamoure soils, frequently flooded

Fordum, frequently flooded

Extent: 30 percent of the unit
Landform(s): flats on flood plains, swales on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .24
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:		*Texture*	*Permeability*	*Available water capacity*	*pH*
A --	0 to 9 in	loam	moderate	1.54 to 2.17 in	4.5 to 8.4
Cg1 --	9 to 25 in	very fine sandy loam	moderately rapid	1.61 to 3.55 in	4.5 to 8.4
Cg2,Cg3,Cg4 --	25 to 60 in	stratified sand to fine sandy loam	rapid	1.39 to 3.46 in	5.6 to 8.4

Fairdale, frequently flooded

Extent: 30 percent of the unit
Landform(s): flats on flood plains, rises on flood plains
Slope gradient: 0 to 3 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 5w
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:		*Texture*	*Permeability*	*Available water capacity*	*pH*
A --	0 to 8 in	silt loam	moderate	1.57 to 1.89 in	7.4 to 7.8
C1..C6 --	8 to 60 in	stratified very fine sandy loam to silty clay loam	moderate	8.83 to 11.95 in	7.4 to 8.4

1147--Fordum, Fairdale, and Lamoure soils, frequently flooded

Lamoure, frequently flooded

Extent: 25 percent of the unit
Landform(s): flats on flood plains, swales on flood plains
Slope gradient: 0 to 1 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 5w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2,A3 -- 0 to 25 in	silty clay loam	moderate	4.79 to 5.54 in	7.4 to 8.4
Cg -- 25 to 38 in	silty clay loam	moderate	2.14 to 2.52 in	7.4 to 8.4
Ab,C'g -- 38 to 60 in	silty clay loam	moderate	3.75 to 4.41 in	7.4 to 8.4

1148--Fairdale and Lamoure soils, occasionally flooded

Fairdale, occasionally flooded

Extent: 45 percent of the unit
Landform(s): flats on flood plains, rises on flood plains
Slope gradient: 0 to 3 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 14 in	loam	moderate	2.83 to 3.40 in	7.4 to 7.8
C1..C6 -- 14 to 60 in	stratified very fine sandy loam to silty clay loam	moderate	7.76 to 10.50 in	7.4 to 8.4

Lamoure, occasionally flooded

Extent: 45 percent of the unit
Landform(s): flats on flood plains, swales on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1,A2,A3 -- 0 to 31 in	silty clay loam	moderate	5.91 to 6.84 in	7.4 to 8.4
Cg -- 31 to 44 in	silt loam	moderate	2.21 to 2.60 in	7.4 to 8.4
Ab,C'g -- 44 to 60 in	stratified sandy loam to silty clay loam	moderate	1.42 to 2.83 in	7.4 to 8.4

1149--Hamerly clay loam

Hamerly

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: C
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	clay loam	moderate	1.54 to 1.99 in	6.6 to 8.4
ABk,Bk -- 9 to 23 in	loam	moderate	2.07 to 2.62 in	7.4 to 8.4
C1,C2 -- 23 to 60 in	loam	moderately slow	5.18 to 7.03 in	7.4 to 8.4

1152B--Sugarbush loamy sand, 1 to 8 percent slopes

Sugarbush

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains, hillslopes on valley trains
Slope gradient: 1 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .10
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	loamy sand	rapid	0.39 to 0.47 in	5.6 to 7.3
E -- 4 to 7 in	loamy sand	rapid	0.28 to 0.35 in	5.6 to 7.3
Bt -- 7 to 22 in	sandy loam	moderately rapid	1.80 to 2.24 in	5.6 to 7.3
2C -- 22 to 60 in	gravelly coarse sand	very rapid	0.76 to 2.27 in	5.6 to 8.4

1152C--Sugarbush loamy sand, 8 to 15 percent slopes

Sugarbush

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains, hillslopes on valley trains
Slope gradient: 8 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .10
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
A --	0 to 5 in	loamy sand	rapid	0.51 to 0.61 in	5.6 to 7.3
E --	5 to 8 in	loamy sand	rapid	0.25 to 0.30 in	5.6 to 7.3
Bt --	8 to 16 in	sandy loam	moderately rapid	0.99 to 1.24 in	5.6 to 7.3
2C --	16 to 60 in	gravelly sand	very rapid	0.87 to 2.62 in	5.6 to 8.4

1152E--Sugarbush loamy sand, 15 to 30 percent slopes

Sugarbush

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains, hillslopes on valley trains
Slope gradient: 15 to 30 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .10
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
A --	0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	5.6 to 7.3
E --	2 to 12 in	loamy sand	rapid	0.89 to 1.08 in	5.6 to 7.3
Bt --	12 to 23 in	sandy loam	moderately rapid	1.32 to 1.65 in	5.6 to 7.3
2C --	23 to 60 in	coarse sand	very rapid	0.74 to 2.22 in	5.6 to 8.4

1200--Egglake loam

Egglake

Extent: 90 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
A --	0 to 4 in	loam	moderately rapid	0.39 to 0.83 in	5.6 to 7.3
E --	4 to 10 in	fine sandy loam	moderately rapid	0.71 to 0.83 in	5.6 to 7.3
Btg --	10 to 28 in	sandy clay loam	moderate	2.90 to 3.26 in	5.6 to 7.3
Cg --	28 to 60 in	sandy loam	moderate	3.51 to 4.15 in	7.4 to 8.4

1233D2--Esmond-Heimdal complex, 12 to 20 percent slopes, eroded

Esmond, eroded

Extent: 60 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 12 to 20 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	loam	moderate	1.02 to 1.13 in	7.4 to 8.4
Bk -- 5 to 22 in	loam	moderate	2.37 to 3.72 in	7.4 to 8.4
C -- 22 to 60 in	loam	moderate	4.16 to 6.05 in	7.4 to 8.4

Heimdal, eroded

Extent: 30 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 12 to 20 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	loam	moderate	1.02 to 1.13 in	6.1 to 7.3
Bw -- 5 to 11 in	loam	moderate	0.71 to 1.12 in	6.1 to 7.8
Bk -- 11 to 28 in	loam	moderate	1.86 to 3.22 in	7.4 to 8.4
C -- 28 to 60 in	loam	moderate	3.51 to 5.10 in	7.4 to 8.4

1238E--Two Inlets-Sugarbush complex, 15 to 30 percent slopes

Two Inlets

Extent: 55 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	sandy loam	rapid	0.20 to 0.24 in	5.6 to 7.3
E -- 2 to 11 in	loamy sand	rapid	0.81 to 1.00 in	5.6 to 7.3
Bt -- 11 to 29 in	loamy sand	rapid	1.63 to 1.99 in	6.1 to 7.3
C -- 29 to 60 in	gravelly coarse sand	very rapid	0.61 to 1.23 in	7.4 to 8.4

Sugarbush

Extent: 35 percent of the unit
Landform(s): hillslopes on moraines
Slope gradient: 15 to 30 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	coarse sandy loam	moderately rapid	0.26 to 0.30 in	5.6 to 7.3
E -- 2 to 9 in	loamy coarse sand	rapid	0.64 to 0.78 in	5.6 to 7.3
Bt -- 9 to 28 in	coarse sandy loam	moderately rapid	2.27 to 2.83 in	5.6 to 7.3
C -- 28 to 60 in	coarse sand	very rapid	0.64 to 1.91 in	5.6 to 8.4

1241B--Sandberg sandy loam, 1 to 6 percent slopes

Sandberg

Extent: 90 percent of the unit
Landform(s): hillslopes on moraines, hillslopes on outwash plains
Slope gradient: 1 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.48 in	5.6 to 7.8
Bt -- 10 to 16 in	gravelly loamy sand	rapid	0.19 to 0.63 in	6.1 to 7.8
C -- 16 to 60 in	gravelly sand	very rapid	0.87 to 2.62 in	7.4 to 8.4

1356--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit
Landform(s):
Slope gradient:
Parent material:
Restrictive feature(s): greater than 60 inches
Flooding:
Ponding:
Drainage class:

Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Kw factor (surface layer)
Land capability, nonirrigated
Hydric soil:
Hydrologic group:
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1804--Hamre muck, ponded

Hamre, ponded

Extent: 90 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: organic material and till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 14 in	muck	moderate	4.96 to 6.80 in	5.1 to 7.8
A -- 14 to 28 in	silt loam	moderate	2.34 to 2.62 in	5.1 to 7.8
C -- 28 to 60 in	loam	moderate	5.42 to 6.06 in	7.4 to 8.4

1825B--Seelyeville muck, sloping, seep land

Seelyeville, sloping, seep land

Extent: 90 percent of the unit
Landform(s): fens on moraines, fens on outwash plains
Slope gradient: 1 to 10 percent
Parent material: herbaceous organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: rare
Drainage class: very poorly drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1..Oa3 -- 0 to 60 in	muck	moderately rapid	20.94 to 26.93 in	

1878--Hamre muck

Hamre

Extent: 90 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: organic material and till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 11 in	muck	moderate	3.86 to 5.29 in	5.1 to 7.8
A -- 11 to 22 in	clay loam	moderate	1.87 to 2.09 in	5.1 to 7.8
C -- 22 to 60 in	clay loam	moderate	6.43 to 7.18 in	7.4 to 8.4

1967--Hamerly-Vallers complex

Hamerly

Extent: 55 percent of the unit
Landform(s): rises on moraines
Slope gradient: 1 to 3 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 9 in	clay loam	moderate	1.54 to 1.99 in	6.6 to 8.4
Bk -- 9 to 13 in	clay loam	moderate	0.59 to 0.75 in	7.4 to 8.4
C -- 13 to 60 in	clay loam	moderately slow	6.56 to 8.90 in	7.4 to 8.4

Vallers

Extent: 35 percent of the unit
Landform(s): flats on moraines, swales on moraines
Slope gradient: 0 to 2 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	silty clay loam	moderately slow	1.28 to 1.56 in	7.4 to 8.4
Bk -- 7 to 20 in	silty clay loam	moderately slow	1.95 to 2.47 in	7.4 to 8.4
C -- 20 to 60 in	clay loam	moderately slow	6.76 to 7.56 in	7.4 to 8.4

Map Unit Description (MN)

Mahnomen County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.